

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-2.(Canceled)

3.(Previously Presented) A light-emitting device having a plurality of pixels, each of said plurality of pixels comprising:

a source signal line, n (n is a natural number,  $2 \leq n$ ) writing gate signal lines, n reading gate signal lines, n writing transistors, n reading transistors, n x m memory circuits for storing n-bit digital image signals for m frames (m is a natural number,  $1 \leq m$ ), n writing memory circuit selection portions, n reading memory circuit selection portions, a current supply line, an EL driving transistor, and an EL element, wherein:

gate electrodes of said n writing transistors are electrically connected to different ones of said n writing gate signal lines, one of a source region and a drain region of each of said n writing transistors is electrically connected to said source signal line, and the other of the source region and the drain region of each of said n writing transistors is electrically connected to signal input portions of said n writing memory circuit selection portions;

each of said n writing memory circuit selection portions includes m signal output portions, with said m signal output portions being respectively and electrically connected to signal input portions of different memory circuits;

each of said n reading memory circuit selection portions includes m signal input portions, with said m signal input portions being respectively and electrically connected to signal output portions of said different memory circuits; and

gate electrodes of said n reading transistors are electrically connected to different ones of said n reading gate signal lines, one of a source region and a drain region of each of said n reading transistors is electrically connected to different signal output portions of said n reading memory circuit selection portions, the other of the source region and the drain region of each of

said n reading transistors is electrically connected to a gate electrode of said EL driving transistor, one of a source region and a drain region of said EL driving transistor is electrically connected to said current supply line, and the other of the source region and the drain region of said EL driving transistor is electrically connected to one electrode of said EL element.

4.(Previously Presented) A light-emitting device having a plurality of pixels, each of said plurality of pixels comprising:

n (n is a natural number,  $2 \leq n$ ) source signal lines, a writing gate signal line, n reading gate signal lines, n writing transistors, n reading transistors,  $n \times m$  memory circuits for storing n-bit digital image signals for m frames (m is a natural number,  $1 \leq m$ ), n writing memory circuit selection portions, n reading memory circuit selection portions, a current supply line, an EL driving transistor, and an EL element, wherein:

gate electrodes of said n writing transistors are electrically connected to said writing gate signal line, one of a source region and a drain region of each of said n writing transistors is electrically connected to a different one of said n source signal lines, the other of the source region and the drain region of each of said n writing transistors is electrically connected to signal input portions of said n writing memory circuit selection portions;

each of said n writing memory circuit selection portions includes m signal output portions, with said m signal output portions being respectively and electrically connected to signal input portions of different memory circuits;

each of said n reading memory circuit selection portions includes m signal input portions, with said m signal input portions being respectively and electrically connected to signal output portions of said different memory circuits; and

gate electrodes of said n reading transistors are electrically connected to any different one of said n reading gate signal lines, one of a source region and a drain region is electrically connected to different signal output portions of said n reading memory circuit selection portions, the other of the source region and the drain region of each of said n reading transistors is electrically connected to a gate electrode of the EL driving transistor, one of a source region and

a drain region of said EL driving transistor is electrically connected to said current supply line, and the other of the source region and the drain region of said EL driving transistor is electrically connected to one electrode of said EL element.

5.(Previously Presented) A light-emitting device according to claim 3, wherein:

each of said writing memory circuit selection portions selects any one of said memory circuits, and is electrically connected to one of said source region and said drain region of said writing transistor to write said digital image signal into said selected memory circuit; and

each of said reading memory circuit selection portions selects any one of said memory circuits in which said digital image signal is stored, and is electrically connected to one of said source region and said drain region of said reading transistor to read out said stored digital image signal.

6.(Original) A light-emitting device according to claim 3, further comprising:

shift registers for sequentially outputting sampling pulses in accordance with a clock signal and a start pulse;

first latch circuits for holding said n-bit ( $n$  is a natural number,  $2 \leq n$ ) digital image signals in accordance with said sampling pulses;

second latch circuits to which said n-bit digital image signals held in said first latch circuits are transferred; and

bit signal selection switches for sequentially selecting said n-bit digital image signals transferred to said second latch circuits for each bit and for outputting said n-bit digital image signals to said source signal line.

7.(Original) A light-emitting device according to claim 4, further comprising:

shift registers for sequentially outputting sampling pulses in accordance with a clock signal and a start pulse; and

first latch circuits for holding 1-bit digital image signals of said n-bit (n is a natural number,  $2 \leq n$ ) digital image signals in accordance with said sampling pulses and for outputting said 1-bit digital image signals to said source signal lines.

8-19.(Canceled)

20.(Previously Presented) A light-emitting device according to claim 4, wherein:

each of said writing memory circuit selection portions selects any one of said memory circuits, and is electrically connected to one of said source region and said drain region of said writing transistor to write said digital image signal into said selected memory circuit; and

each of said reading memory circuit selection portions selects any one of said memory circuits in which said digital image signal is stored, and is electrically connected to one of said source region and said drain region of said reading transistor to read out said stored digital image signal.

21.(Canceled)

22.(Previously Presented) A light-emitting device according to claim 3, wherein said memory circuits are static memories (SRAM).

23.(Previously Presented) A light-emitting device according to claim 4, wherein said memory circuits are static memories (SRAM).

24.(Canceled)

25.(Previously Presented) A light-emitting device according to claim 3, wherein said memory circuits are ferroelectric memories (FeRAM).

26.(Previously Presented) A light-emitting device according to claim 4, wherein said memory circuits are ferroelectric memories (FeRAM).

27.(Canceled)

28.(Previously Presented) A light-emitting device according to claim 3, wherein said memory circuits are dynamic memories (DRAM).

29.(Previously Presented) A light-emitting device according to claim 4, wherein said memory circuits are dynamic memories (DRAM).

30.(Canceled)

31.(Previously Presented) A light-emitting device according to claim 3, wherein said memory circuits are formed over one selected from the group consisting of a glass substrate, a plastic substrate, a stainless substrate, and a single crystal wafer.

32.(Previously Presented) A light-emitting device according to claim 4, wherein said memory circuits are formed over one selected from the group consisting of a glass substrate, a plastic substrate, a stainless substrate, and a single crystal wafer.

33.(Canceled)

34.(Previously Presented) A light-emitting device according to claim 3, wherein said light-emitting device is an electro-luminescence display device.

35.(Previously Presented) A light-emitting device according to claim 4, wherein said light-emitting device is an electro-luminescence display device.

36.(Canceled)

37.(Previously Presented) A light-emitting device according to claim 3, wherein said light-emitting device is incorporated in one selected from the group consisting of a video camera, a personal computer, a portable telephone, a head-mount display, a digital camera, and a portable electronic book.

38.(Previously Presented) A light-emitting device according to claim 4, wherein said light-emitting device is incorporated in one selected from the group consisting of a video camera, a personal computer, a portable telephone, a head-mount display, a digital camera, and a portable electronic book.

39-43.(Canceled)

44.(Previously Presented) The light-emitting device of claim 3, wherein  $m > 1$ .

45.(Previously Presented) The light-emitting device of claim 4, wherein  $m > 1$ .

Please add new claims 46-63 as follows.

46.(New) A light-emitting device having a plurality of pixels, each of said plurality of pixels comprising:

a source signal line,  $n$  ( $n$  is a natural number,  $2 \leq n$ ) writing transistors,  $n$  reading transistors,  $n \times m$  memory circuits for storing  $n$ -bit digital image signals for  $m$  frames ( $m$  is a natural number,  $1 \leq m$ ),  $n$  writing memory circuit selection portions,  $n$  reading memory circuit selection portions, a current supply line, an EL driving transistor, and an EL element, wherein:

one of a source region and a drain region of each of said n writing transistors is electrically connected to said source signal line, and the other of the source region and the drain region of each of said n writing transistors is electrically connected to signal input portions of said n writing memory circuit selection portions;

each of said n writing memory circuit selection portions includes m signal output portions, with said m signal output portions being respectively and electrically connected to signal input portions of different memory circuits;

each of said n reading memory circuit selection portions includes m signal input portions, with said m signal input portions being respectively and electrically connected to signal output portions of said different memory circuits; and

one of a source region and a drain region of each of said n reading transistors is electrically connected to different signal output portions of said n reading memory circuit selection portions, the other of the source region and the drain region of each of said n reading transistors is electrically connected to a gate electrode of said EL driving transistor, one of a source region and a drain region of said EL driving transistor is electrically connected to said current supply line, and the other of the source region and the drain region of said EL driving transistor is electrically connected to one electrode of said EL element.

47.(New) A light-emitting device having a plurality of pixels, each of said plurality of pixels comprising:

n (n is a natural number,  $2 \leq n$ ) source signal lines, n writing transistors, n reading transistors,  $n \times m$  memory circuits for storing n-bit digital image signals for m frames (m is a natural number,  $1 \leq m$ ), n writing memory circuit selection portions, n reading memory circuit selection portions, a current supply line, an EL driving transistor, and an EL element, wherein:

one of a source region and a drain region of each of said n writing transistors is electrically connected to a different one of said n source signal lines, the other of the source region and the drain region of each of said n writing transistors is electrically connected to signal input portions of said n writing memory circuit selection portions;

each of said n writing memory circuit selection portions includes m signal output portions, with said m signal output portions being respectively and electrically connected to signal input portions of different memory circuits;

each of said n reading memory circuit selection portions includes m signal input portions, with said m signal input portions being respectively and electrically connected to signal output portions of said different memory circuits; and

one of a source region and a drain region is electrically connected to different signal output portions of said n reading memory circuit selection portions, the other of the source region and the drain region of each of said n reading transistors is electrically connected to a gate electrode of the EL driving transistor, one of a source region and a drain region of said EL driving transistor is electrically connected to said current supply line, and the other of the source region and the drain region of said EL driving transistor is electrically connected to one electrode of said EL element.

48.(New) A light-emitting device according to claim 46, wherein:

each of said writing memory circuit selection portions selects any one of said memory circuits, and is electrically connected to one of said source region and said drain region of said writing transistor to write said digital image signal into said selected memory circuit; and

each of said reading memory circuit selection portions selects any one of said memory circuits in which said digital image signal is stored, and is electrically connected to one of said source region and said drain region of said reading transistor to read out said stored digital image signal.

49.(New) A light-emitting device according to claim 46, further comprising:

shift registers for sequentially outputting sampling pulses in accordance with a clock signal and a start pulse;

first latch circuits for holding said n-bit (n is a natural number,  $2 \leq n$ ) digital image signals in accordance with said sampling pulses;

second latch circuits to which said n-bit digital image signals held in said first latch circuits are transferred; and

bit signal selection switches for sequentially selecting said n-bit digital image signals transferred to said second latch circuits for each bit and for outputting said n-bit digital image signals to said source signal line.

50.(New) A light-emitting device according to claim 47, further comprising:  
shift registers for sequentially outputting sampling pulses in accordance with a clock signal and a start pulse; and

first latch circuits for holding 1-bit digital image signals of said n-bit (n is a natural number,  $2 \leq n$ ) digital image signals in accordance with said sampling pulses and for outputting said 1-bit digital image signals to said source signal lines.

51.(New) A light-emitting device according to claim 47, wherein:  
each of said writing memory circuit selection portions selects any one of said memory circuits, and is electrically connected to one of said source region and said drain region of said writing transistor to write said digital image signal into said selected memory circuit; and  
each of said reading memory circuit selection portions selects any one of said memory circuits in which said digital image signal is stored, and is electrically connected to one of said source region and said drain region of said reading transistor to read out said stored digital image signal.

52.(New) A light-emitting device according to claim 46, wherein said memory circuits are static memories (SRAM).

53.(New) A light-emitting device according to claim 47, wherein said memory circuits are static memories (SRAM).

54.(New) A light-emitting device according to claim 46, wherein said memory circuits are ferroelectric memories (FeRAM).

55.(New) A light-emitting device according to claim 47, wherein said memory circuits are ferroelectric memories (FeRAM).

56.(New) A light-emitting device according to claim 46, wherein said memory circuits are dynamic memories (DRAM).

57.(New) A light-emitting device according to claim 47, wherein said memory circuits are dynamic memories (DRAM).

58.(New) A light-emitting device according to claim 46, wherein said memory circuits are formed over one selected from the group consisting of a glass substrate, a plastic substrate, a stainless substrate, and a single crystal wafer.

59.(New) A light-emitting device according to claim 47, wherein said memory circuits are formed over one selected from the group consisting of a glass substrate, a plastic substrate, a stainless substrate, and a single crystal wafer.

60.(New) A light-emitting device according to claim 46, wherein said light-emitting device is an electro-luminescence display device.

61.(New) A light-emitting device according to claim 47, wherein said light-emitting device is an electro-luminescence display device.

62.(New) A light-emitting device according to claim 46, wherein said light-emitting device is incorporated in one selected from the group consisting of a video camera, a personal

computer, a portable telephone, a head-mount display, a digital camera, and a portable electronic book.

63.(New) A light-emitting device according to claim 47, wherein said light-emitting device is incorporated in one selected from the group consisting of a video camera, a personal computer, a portable telephone, a head-mount display, a digital camera, and a portable electronic book.